ATTACHMENT A

This attachment provides an update to the "Minimum Monitoring Requirements" section originally introduced as part of the network plan template that was released with 2007 network plan memo. Several updates have been made to these tables in order to further clarify the number of minimum required monitors. The specific changes are:

- *Addition of design value site columns for ozone and $PM_{2.5}$.*
- *Addition of a table to address minimum monitoring requirements for $PM_{2.5}$ continuous instruments per 40 CFR 58, Appendix D Section 4.7.2.*
- *Revision of statistics for PM_{10}: "Design Value" was revised to "Max Concentration" and "Max Concentration Site" column was added.*
- *New tables added to address the changes to minimum monitoring requirements since 2007: NO2, SO2, CO, Pb at NCore, and source-oriented Pb.*

The included sample tables can be incorporated into the annual monitoring network plan to display how an agency is assessing and meeting the minimum monitoring requirements for each of the criteria pollutants. EPA recommends that agencies designate a single section in their network plan that provides the analyses of minimum monitoring requirements for their jurisdiction. In some cases, the sample tables reflect future minimum monitoring requirements. The date by which these future monitoring requirements should be included in the network plan is specified by the regulation. An example of this are the CO near-road monitoring requirements which come into effect in 2015 and 2017 according to 40 CFR 58.13(e) and therefore reporting for these in the network plan is required in 2014 and 2016 respectively.

For minimum monitoring requirements:

-state whether or not this network meets the minimum monitoring requirements for all criteria pollutants.

-if exceptional events affect your design value, please provide design values both including and excluding flagged exceptional event data, and calculate minimum monitoring requirements based on both.

Ozone

(Note: Refer to section 4.1 and Table D-2 of Appendix D to 40 CFR Part 58)

Table 1. Minimum Monitoring Requirements for Ozone.

MSA	County(ies)	Population & Census year	8-hr Design Value [ppb], DV Years[1]	Design Value site (name, AQS ID)	# Required Monitors	# Active Monitors	# Additional Monitors Needed

[1]DV Years = the three years over which the design value (DV) was calculated (e.g., 2008-2010)

Monitors required for SIP or Maintenance Plan:

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$PM_{2.5}$
(Note: Refer to sections 4.7.1, 4.7.2 and Table D-5 of Appendix D to 40 CFR Part 58)

Table 2a. Minimum Monitoring Requirements for $PM_{2.5}$ SLAMS. (FRM/FEM/ARM, see 40CFR 58 App D Section 4.7.1 and Table D-5)

MSA	County(ies)	Population & Census year	Annual Design Value [µg/m3], DV Years[1]	Annual Design Value site (name, AQS ID)	Daily Design Value[µg/m3], DV years	Daily Design Value site (name, AQS ID)	# Required SLAMS Monitors	# Active SLAMS Monitors	# Additional SLAMS Monitors Needed

[1]DV Years = the three years over which the design value (DV) was calculated (e.g., 2008-2010)

Table 2b. Minimum Monitoring Requirements for continuous $PM_{2.5}$ monitors. (FEM/ARM and non-FEM, see 40CFR 58 App D Section 4.7.2)

MSA	County(ies)	Population & Census year	Annual Design Value [µg/m3], DV Years[1]	Annual Design Value site (name, AQS ID)	Daily Design Value[µg/m3], DV years	Daily Design Value site (name, AQS ID)	# Required Continuous Monitors	# Active Continuous Monitors	# Additional Continuous Monitors Needed

[1]DV Years = the three years over which the design value (DV) was calculated (e.g., 2008-2010)

Monitors required for SIP or Maintenance Plan:

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PM_{10}
(Note: Refer to section 4.6 and Table D-4 of Appendix D to 40 CFR Part 58)

Table 3. Minimum Monitoring Requirements for PM_{10}.

MSA	County(ies)	Population & Census year	Max Concentration [µg/m^3]	Max Concentration site (name, AQS ID)	# Required Monitors	# Active Monitors	# Additional Monitors Needed

Monitors required for SIP or Maintenance Plan:

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NO_2
(Note: Refer to section 4.3 of Appendix D to 40 CFR Part 58)

Table 4. Minimum Monitoring Requirements for NO_2.

CBSA	Population & Census year	Max AADT counts (year)	# Required Near-road Monitors	# Active Near-road Monitors	# Additional Near-road Monitors Needed	# Required Area-wide Monitors	# Active Area-wide Monitors	# Additional Area-wide Monitors Needed

Monitors required for SIP or Maintenance Plan:
Monitors required for PAMS:
EPA Regional Administrator-required monitors per 40 CFR 58, App. D 4.3.4:
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SO_2
(Note: Refer to section 4.4 of Appendix D to 40 CFR Part 58)

Table 5. Minimum Monitoring Requirements for SO_2.

CBSA	County(ies)	Population & Census year	Total SO_2[1] [tons/year]	Population Weighted Emissions Index[2] [million persons-tons per year]	# Required Monitors	# Active Monitors	# Additional Monitors Needed

[1]Using NEI data
[2]Calculated by multiplying CBSA population and total SO_2 and dividing product by one million

Monitors required for SIP or Maintenance Plan:
EPA Regional Administrator-required monitors per 40 CFR 58, App. D 4.4.3:

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CO
(Note: Refer to section 4.2 of Appendix D to 40 CFR Part 58)

Table 6. Minimum Monitoring Requirements for CO.

CBSA	Population & Census year	# Required Near-Road Monitors	# Active Near-Road Monitors	# Additional Monitors Needed

Monitors required for SIP or Maintenance Plan:
EPA Regional Administrator-required monitors per 40 CFR 58, App.D 4.2.2:

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Pb
(Note: Refer to section 4.5 of Appendix D to 40 CFR Part 58)

Table 7a. Minimum Monitoring Requirements for Pb at NCore.

NCore Site (name, AQS ID)	CBSA	Population & Census year	# Required Monitors	# Active Monitors	# Additional Monitors Needed

Table 7b. Source-Oriented Pb Monitoring (including airports)

Source Name	Address	Pb Emissions (tons per year)	Emission Inventory Source & Data Year	Max 3-Month Design Value* [µg/m^3]	Design Value date (third month, year)	# Required Monitors	# Active Monitors	# Additional Monitors Needed

*consider data from the past 3 years.

Monitors required for SIP or Maintenance Plan:
EPA Regional Administrator-required monitors per 40 CFR 58, App. D 4.5(c):